

- II. Claims 56-61, 78-80, 82, 84, and 89-94, drawn to immunogenic compositions comprising pertactins of *Bordetella parapertussis*, classified in class 424, subclass 184.1
- III. Claims 56-61, 78-80, 82, 84, and 89-94, drawn to immunogenic compositions comprising pertactins of *Bordetella pertussis*, classified in class 424, subclass 184-1.
- IV. Claims 62-63 and 76-77, drawn to polypeptides, classified in class 530, subclass 350.
- V. Claims 64-66 and 81, drawn to polynucleotides, classified in class 536, subclass 23.7.
- VI. Claims 67-69, drawn to antibodies, classified in class 530, subclass 387.1.
- VII. Claim 70, drawn to an immunological complex of a polypeptide and an antibody, classified in class 424, subclass 178.1.
- VIII. Claims 71-72, drawn to methods of detecting infection by *Bordetella* comprising detecting a polypeptide, classified in class 435, subclass 7.1.
- IX. Claims 73-75, drawn to a diagnostic method comprising detecting antibodies, classified in class 435, subclass 7.4.

- X. Claim 83, drawn to a method for the detecting of *Bordetella* comprising detecting DNA, classified in class 435, subclass 6.
- XI. Claim 85 drawn to a composition comprising a pertactin of *pertussis*, a pertacin of *parapertussis* and a pertactin of *bronchiseptica*, classified in class 424, subclass 203.1.
- XII. Claims 86-88, drawn to a composition of a pertactin of *bronchiseptica*, FHA of *bronchiseptica* and a pertactin of *parapertussis*, classified in class 424, subclass 203.1.
- XIII. Claim 95, drawn to a method of treating *Bordetella* infections, classified in class 424, subclass 184.1.
- XIV. Claims 96-97, drawn to microarrays and DNA chips, classified in class 536, subclass 23.1.

In addition, Groups I-XIV were further restricted to a single protein sequence, (e.g., SEQ ID NO: 7, 8, 9, 14, 15, 16, 17, 18, 19, 20, 21, or 22), or a single DNA sequence encoding a single protein, or a single antibody species which binds a single protein, or a method of treatment with a single protein.

Applicants provisionally elect to prosecute Group I, claims 56-61, 78-80, 82, 84, and 89-94 drawn to immunogenic compositions comprising pertactins of *Bordetella bronchiseptica*, with traverse. Furthermore, Applicants provisionally elect that SEQ ID NO: 8 be examined for this group, also with traverse.

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Applicants respectfully submit that the restriction requirement between groups I, II, and III, is not proper and has impermissibly limited the scope of the claims. First, independent claim 56 recites an "immunogenic composition comprising a mixture of pertactins of *Bordetella* species . . . wherein the composition comprises at least one of: (A) pertactins of *Bordetella bronchiseptica*, (B) *Bordetella parapertussis*, and (C) *Bordetella pertussis*." (Emphasis added.) Therefore, the claim can encompass a combination of pertactins from each of the species which were separated into distinct groups by the Office. By requiring Applicants to elect one of these groups, a claim to a composition including more than one group will never be examined. Applicants respectfully submit that they have a statutory right under 35 U.S.C. § 112, second paragraph, to claim the subject matter they regard as their invention as they choose. As decided in *In re Weber*, 198 U.S.P.Q. 328, 331 (C.C.P.A. 1978), "[i]f . . . a single claim is required to be divided up and presented in several applications, that claim would never be considered on its merits. The totality of the resulting fragmentary claims would not necessarily be the equivalent of the original claim." Indeed, the C.C.P.A. has characterized this action as tantamount to a refusal to examine.

Furthermore, the Office asserted that Groups I, II, and III are distinct inventions because they require a "distinct protein with a distinct biological structure and activity." (Paper No. 10, page 4, lines 5-10.) Even if these inventions are distinct, "[i]f the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits even though it includes claims to independent or distinct inventions." (M.P.E.P. § 803; emphasis added by Applicants)

The subject matter of the claims in Groups I, II, and III were all classified by the Office

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as class 424, subclass 184.1. Therefore, Applicants submit that the subject matter of the claims in these groups would encompass the same search, and therefore would not be a serious burden.

Regarding the restriction to one protein sequence, Applicants respectfully submit that the Office has again improperly limited the scope of the claims in this requirement. The sequences identified in the restriction requirement recite the different regions of the pertactin of *B. bronchoseptica*. The Office required that an restriction be made to "a single protein sequence," but claim 56 recites a "mixture" comprising "at least one of" several different proteins. Therefore, as asserted above, the result of this restriction is to alter the claims to encompass only a single protein sequence, but never a mixture of several protein sequences as indicated in Applicants' original claim. Again, this restriction violates Applicants' statutory right under 35 U.S.C. § 112, second paragraph, to claim the subject matter they regard as their invention as they choose.

Applicants respectfully request that the restriction requirement be withdrawn and all of the pending claims, encompassing the indicated sequence identifiers be considered together.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

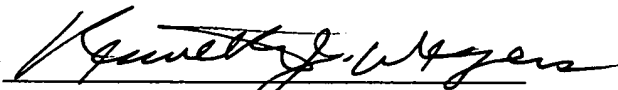
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Respectfully submitted,

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